**That which is Claimed is:**

1. An isolated nucleic acid selected from the group consisting of:

(a) a nucleic acid according to **SEQ ID NO: 2** encoding preduramycin;

(b) a nucleic acid according to **SEQ ID NO: 4** encoding produramycin;

(c) nucleic acids that are at least 95 percent identical in sequence to nucleic acids of (a) or (b) above and which encode preduramycin or produramycin;

(d) nucleic acids that differ from the nucleic acids of (a), (b), or (c) above due to the degeneracy of the genetic code, and which encode a preduramycin or produramycin encoded by a nucleic acid of (a), (b), or (c) above.

2. The nucleic acid according to claim 1, wherein said nucleic acid is a DNA.

3. The nucleic acid according to claim 1 having a sequence according to **SEQ ID NO: 2.**

4. The nucleic acid according to claim 1 having a sequence according to **SEQ ID NO: 4.**

5. A recombinant nucleic acid comprising a nucleic acid according to claim 1 operatively associated with a promoter.

6. A vector comprising a recombinant nucleic acid according to claim 5.

7. The vector of claim 6, wherein said vector is a plasmid.

8. A recombinant cell comprising a heterologous nucleic acid according to claim 1 and capable of expressing the encoded preduramycin or produramycin.

9. The recombinant cell of claim 8, wherein said host cell is a gram positive bacteria.

10. The recombinant cell of claim 8, wherein said cell is selected from the group consisting of genus *Bacillus*, genus *Streptomyces* and genus *Streptococcus*.

11. A method of making preduramycin, produramycin or duramycin, comprising:

culturing a host cell according to claim 8 under conditions which the encoded preduramycin or produramycin is expressed; and then

collecting preduramycin, produramycin or duramycin from said cultured host cells.

12. The method of claim 11, wherein said host cell is a gram positive bacteria.

13. The method of claim 11, wherein said host cell is selected from the group consisting of genus *Bacillus*, genus *Streptomyces* and genus *Streptococcus*.

14. The method of claim 11, wherein said culturing step is carried out under conditions in which duramycin is produced by said host cell; and wherein said collecting step comprises collecting duramycin from said cultured host cells.